NEC

Customer Notification

PG-FPL

Flash Memory Programmer

Operating Precautions

Target Devices

All 78K0/KX1+ devices
All 78K0/FX1+ devices
µPD78F0714
µPD78F0731
µPD78F0822B
µPD78F0876
All V850ES/Kx1H devices
All V850ES/Kx1+ devices
All V850ES/Sx2 devices
All V850ES/Fx2 devices
All V850ES/Jx2 devices
All V850ES/Hx2 devices
µPD70F3187

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(A) Table of Operating Precautions

No.	Outline	Control Code	PG-FPL A V1.00	A V1.10	A V1.20	A V1.22	A V1.30	A V1.40	A V1.50
1	Wrong behavior of the “Checksum after Program” function		✗	✓	✓	✓	✓	✓	✓
2	Support of manual reset function		✗	✓	✓	✓	✓	✓	✓
3	Transmission of program file may fail		✗	✗	✓	✓	✓	✓	✓
4	Wrong address is displayed when a file is downloaded		✗	✗	✓	✓	✓	✓	✓
5	Com-ports larger than 9 cannot be selected		✗	✗	✓	✓	✓	✓	✓
6	Reset is output, when opening Device setup		✗	✗	✓	✓	✓	✓	✓
7	Fixed wait-time(2s) after reset release for executing a write command		✗	✗	✓	✓	✓	✓	✓
8	Security settings are executed illegally		✗	✗	✓	✓	✓	✓	✓
9	Change of COM-port selection		—	—	—	✓	✓	✓	✓
10	Improvement of speed for write command		—	—	—	✓	✓	✓	✓
11	Support of devices with flash memory consisting of 255 or more blocks		—	—	—	—	✓	✓	✓
12	Restriction related to Program and Verify commands in Block mode		✓	✓	✗	✗	✗	✓	✓
13	Support of devices with code flash and data flash areas		—	—	—	—	—	—	✓

—: Specification change not implemented
✓ : Not applicable or corrected
✗ : applicable

(B) Description of Operating Precautions

No.1	Wrong behavior of the “Checksum after Program” function

Details

When Verify is executed individually after the “Checksum after Program” setting is made valid, Checksum is automatically performed after Verify is complete.

No.2	Support of manual reset function

Details

A window that prompts a manual reset operation now appears even if a reset signal cannot be connected to the target cable. This window is opened by clicking the [Setup] button on the toolbar in the Main window, and the manual reset function becomes valid after checking the “Target Reset Message” checkbox in this window (Figure 1 or 2).

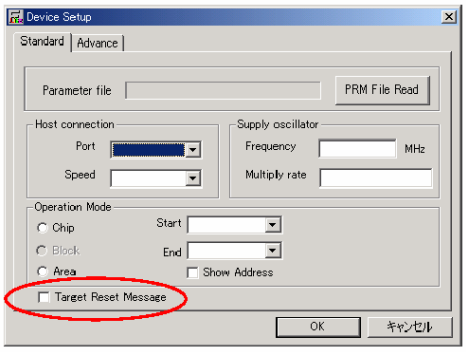

Figure 1. Device Setup Window (Standard Tab)

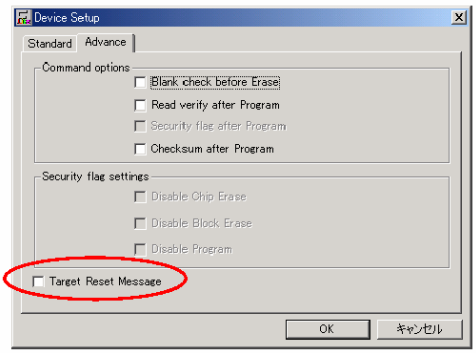

Figure 2. Device Setup Window (Advance Tab)

Operation procedure when Target Reset Message is selected

(1) Turn on the power to the target system.
(2) Execute a write command. The following message appears and the operation is suspended.

(3) Reset the target system.
(4) Click the OK button to resume the write operation.

No.3	Transmission of program file may fail
	Details When using a program file that does not start from address 0h, data transmitted to the device becomes illegal in Program and Verify processing.

No.4	Wrong address is displayed when a file is downloaded
	Details When a program file that does not start from address 0h is loaded, the display in the [load file] area in the programmer parameter window displays an address like “Area: 000000h-xxxxxxh”, which starts from address 0h.

No.5	Com-ports larger than 9 cannot be selected
	Details If the USB driver “USB Serial Port” is recognized as COM10 or a later port, COM10 or a later port cannot be selected in the Device Setup window.

No6	Reset is output, when opening Device setup
	Details When opening the Device Setup window, a RESET signal is output temporarily

No.7	Fixed wait-time(2s) after reset release for executing a write command
	Details When a write command is executed, the time taken from a reset signal release to a write command transmission was fixed to two seconds, regardless of the parameter file setting. This specification has been modified so that the value set in the parameter file is referenced.

No.8	Security settings are executed illegally
	Details If the Program command or Autoprocedure (EPV) command is executed in an environment where GUI software V1.10 or earlier and parameter file V1.10 or later are used in a device that supports the security setting command, normally the security setting commands cannot be executed but they can be executed illegally. The items to be set illegally are “Disable Chip Erase” (disabling Chip Erase command), “Disable Block Erase” (disabling Block Erase command), and “Disable Program” (disabling Program command).

No.9	Change of COM-port selection
	Details The specification has been changed so that all of the COM ports that are detected by the GUI software can be selected. This specification has been implemented in products with control code A (GUI: V1.22) or later.

No.10	Improvement of speed for write command
	Details Unnecessary waits that occurred during communication with the device via the write command have been eliminated, and thus the communication speed has been improved. This modification has been implemented in products with control code A (GUI: V1.22) or later.

No.11	Support of devices with flash memory consisting of 255 or more blocks
	Details Devices with flash memory up to 512 blocks are supported This modification has been implemented in products with control code A (GUI: V1.30) or later.

No.12	Restriction related to Program and Verify commands in Block mode
	Details If the Program or Verify command is executed in Block mode under the following conditions, data is transmitted from an address different from the start address set in Block mode. Condition 1: In the Operation Mode area of the Standard Device Setup dialog box, the Block radio button is selected and a value other than “0” is selected from the Start drop-down list. Condition 2: The used program file, which starts from an address lower than the one specified in condition 1, is selected by the [Load] command. [Workaround] There is no workaround. This restriction has been corrected in products with control code A (GUI: V1.40) or later.

No.13	Support of devices with code flash and data flash areas
	Details Devices that have code flash and data flash, such as the V850ES/FX3, are supported now. Writing the code flash area is supported, but the data flash is not. A chip erase command will erase both, code flash and data flash. This modification has been implemented in products with control code A (GUI: V1.50) or later.

(C) Cautions on Operating

No. 1 Power supply

(a) The 5 V power supplied from the PG-FPL depends on the USB port of the host machine. Therefore, if the power supplied from the USB port is unstable or does not satisfy the specifications of the target device, supply the power from the target system.

(b) If the MODE switch is set to MODE2, MODE3, or MODE4 (supplying power from the PG-FPL), the voltage set to the VDD/VDD2 pin is output when the PG-FPL is connected to the host machine. Therefore, be sure to disconnect the PG-FPL and the target system before connecting/disconnecting the device on the target system.

No. 2 Caution when using PG-FPL in Windows 98/Me

When the host machine is connected to the PG-FPL in the Windows 98 or Windows Me environment, the /RESET pin outputs a high level. If the target system is disconnected from the PG-FPL without executing a target command at all, the target system may be damaged.

[Procedure 1]

Execute the target command at least once after the PG-FPL is connected to the target system. Consequently, the /RESET pin output becomes low level.

[Procedure 2]

When another OS is used, the /RESET pin is low level from the first, so [Procedure 1] does not cause this problem.

[Procedure 1]

1. The host machine and the PG-FPL are connected and the power is supplied via the USB port.
2. The target system is connected to the PG-FPL.
3. The target system is disconnected from the PG-FPL **without** executing the target command.

[Procedure 2]

1. The host machine and the PG-FPL are connected and the power is supplied via the USB port.
2. The target system is connected to the PG-FPL.
3. The target system is disconnected from the PG-FPL **after** the target command is executed.

No. 3 Caution for MODE switch

Be sure to perform the MODE switch setting before using the PG-FPL.

If the MODE switch is not set correctly, the PG-FPL or the target system may be damaged. For details on setting the MODE switch, refer to the PG-FPL user's manual.

No. 4 Checksum value differences between PG-FPL and PG-FP4

Since the checksum calculation method differs between the PG-FP4 and PG-FPL, the checksum value differs depending of the flash memory programmer to be used.

No. 5 General cautions on handling this product

(a) Circumstances not covered by product guarantee

- If the product was disassembled, altered, or repaired by the customer
- If it was dropped, broken, or given another strong shock
- Use at overvoltage, use outside guaranteed temperature range, storing outside guaranteed temperature range
- If power was turned on while the USB cable or target system connection was in an unsatisfactory state
- If the USB cable, connection cable, or the like was bent or pulled excessively
- If a power supply other than the one supplied with the product is used
- If the product got wet
- If the product and target system were connected while a potential difference existed between the GND of the product and the GND of the target system
- If a connector or cable was removed while the power was being supplied to the product
- If an excessive load was placed on a connector or socket

(b) Safety precaution

- Be careful of electrical shock. There is a danger of electrical shock if the product is used as described above in (a) Circumstances not covered by product guarantee.

(D) Valid Specification

Item	Date published	Document No.	Document Title
1	September 2005	U17788E	PG-FPL User's Manual

(E) Revision History

Item	Date published	Document No.	Comment
1	October 2005	TPS-LE-OP-TFPL-1	1st Release
2	January 2006	TPS-LE-OP-TFPL-2	1st Update
3	April 2006	TPS-LE-OP-TFPL-3	2nd Update
4	July 2006	TPS-LE-OP-TFPL-3	3rd Update